

RECEIVED
CENTRAL FAX CENTER
MAY 12 2010

2
IN THE CLAIMS

Please cancel claim 1 without prejudice or disclaimer, and add claims 9 thru 11 as follows:

Claims 1 thru 8. (Canceled)

9. (New) A driving mechanism for transferring torque from a driving shaft to a driven shaft, said driving mechanism comprising a first connecting part-unit attached to the driving shaft, a second connection part-unit attached to the driven shaft, and a coupling gear inserted between the first connecting part-unit and the second connecting part-unit;

wherein the first connecting part-unit includes an output member attached to the driving shaft in a fixed position, a first motion transfer unit connected to the output member via a one-degree-of-freedom connecting element, and a motion piece connected to the first motion transfer unit in a rotating manner;

wherein there is an intermediate connecting piece between one end of the first motion transfer unit connected to the output member and another end connected to the motion piece;

wherein a section between the one end of the first motion transfer unit and the intermediate connecting piece, and a section between said another end of the first motion transfer unit and the intermediate connecting piece, are at an angle (α) in a range of 0-180° with respect to each other;

wherein the second connecting part-unit includes an input member attached to the driven

3

shaft in a fixed position, a first motion transfer unit attached to the input member via a one-degree-of-freedom connecting element, and a motion piece connected to the first motion transfer unit in a rotating manner;

wherein there is an intermediate connecting piece between one end of the first motion transfer unit connected to the input member and another end connected to the motion piece, and a section between the one end of the first motion transfer unit and the intermediate connecting piece, and a section between the other end of the first motion transfer unit and the intermediate connecting piece, are at an angle (β) in a range of 0-180° with respect to each other;

said driving mechanism further comprising a coupling gear which includes a first torque transfer shaft and a second torque transfer shaft embedded in a housing in a rotating manner, the first torque transfer shaft having an input end and an output end, the second torque transfer shaft having an input end and an output end, the input end of the first torque transfer shaft being connected to the intermediate connecting piece of the first motion transfer unit of the first connecting part-unit, and the output end of the first torque transfer shaft being connected to the intermediate connecting piece of the first motion transfer unit of the second connecting part-unit, thereby allowing torque transfer in a self-adjusting manner; and

wherein the input end of the second torque transfer shaft is connected to the motion piece of the first motion transfer unit of the first connecting part-unit, and the output end of the second torque transfer shaft is connected to the motion piece of the first motion transfer unit of the second

4

connecting part-unit, thereby allowing torque transfer in a self-adjusting manner.

10. (New) A driving mechanism as recited in claim 9, wherein a size and a shape of the output member, the first motion transfer unit and the motion piece of the first connecting part-unit are the same as a size and a shape of the input member, the first motion transfer unit and the motion piece of the second connecting part-unit.
11. (New) A driving mechanism as recited in claim 10, wherein the one-degree-of-freedom connecting element belonging to the first connecting part-unit is an element which allows rotation of the first motion transfer unit around a main axis in relation to the output member.
12. (New) A driving mechanism as recited claim 11, wherein the one-degree-of-freedom connecting element belonging to the second connecting part-unit is an element which allows rotation of the first motion transfer unit around a main axis in relation to the input member.
13. (New) A driving mechanism as recited in claim 12, wherein an axis of rotation of the first torque transfer shaft and an axis of rotation of the second torque transfer shaft are parallel to each other.
14. (New) A driving mechanism as recited in claim 13, wherein the housing comprises a fixed house-member and a swinging house-member, the fixed house-member being in a fixed position, and one of the first torque transfer shaft and the second torque transfer shaft is fitted in the fixed house-member in a rotating manner, while another of the first torque transfer shaft and the second torque transfer shaft is fitted in the other house-member in a rotating manner, and the swinging house-

5

member is attached in a fixed position to one of the first torque transfer shaft and the second torque transfer shaft which is situated in the fixed house-member.

15. (New) A driving mechanism as recited in claim 12, wherein an axis of rotation of the first torque transfer shaft and an axis of rotation of the second torque transfer shaft are parallel to each other.
16. (New) A driving mechanism as recited in claim 11, wherein an axis of rotation of the first torque transfer shaft and an axis of rotation of the second torque transfer shaft are parallel to each other.
17. (New) A driving mechanism as recited claim 10, wherein the one-degree-of-freedom connecting element belonging to the second connecting part-unit is an element which allows rotation of the first motion transfer unit around a main axis in relation to the input member.
18. (New) A driving mechanism as recited in claim 10, wherein an axis of rotation of the first torque transfer shaft and an axis of rotation of the second torque transfer shaft are parallel to each other.
19. (New) A driving mechanism as recited in claim 10, wherein an axis of rotation of the first torque transfer shaft and an axis of rotation of the second torque transfer shaft are parallel to each other.
20. (New) A driving mechanism as recited in claim 9, wherein the one-degree-of-freedom connecting element belonging to the first connecting part-unit is an element which allows rotation of the first motion transfer unit around a main axis in relation to the output member

21. (New) A driving mechanism as recited claim 20, wherein the one-degree-of-freedom connecting element belonging to the second connecting part-unit is an element which allows rotation of the first motion transfer unit around a main axis in relation to the input member.
22. (New) A driving mechanism as recited in claim 20, wherein an axis of rotation of the first torque transfer shaft and an axis of rotation of the second torque transfer shaft are parallel to each other.
23. (New) A driving mechanism as recited claim 9, wherein the one-degree-of-freedom connecting element belonging to the second connecting part-unit is an element which allows rotation of the first motion transfer unit around a main axis in relation to the input member.
24. (New) A driving mechanism as recited in claim 23, wherein an axis of rotation of the first torque transfer shaft and an axis of rotation of the second torque transfer shaft are parallel to each other.
25. (New) A driving mechanism as recited in claim 9, wherein an axis of rotation of the first torque transfer shaft and an axis of rotation of the second torque transfer shaft are parallel to each other.
26. (New) A driving mechanism as recited in claim 25, wherein the housing comprises a fixed house-member and a swinging house-member, the fixed house-member being in a fixed position, and one of the first torque transfer shaft and the second torque transfer shaft is fitted in the fixed house-member in a rotating manner, while another of the first torque transfer shaft and the second torque transfer shaft is fitted in the other house-member in a rotating manner, and the swinging house-

7

member is attached in a fixed position to one of the first torque transfer shaft and the second torque transfer shaft which is situated in the fixed house-member.

27. (New) A driving mechanism as recited in claim 25, wherein a straight line touching the input end of the first torque transfer shaft and the input end of the second torque transfer shaft, and a straight line touching the output end of the first torque transfer shaft and the output end of the second torque transfer shaft, are parallel to each other.
28. (New) A driving mechanism as recited in claim 9, wherein an axis of rotation of the first torque transfer shaft and an axis of rotation of the second torque transfer shaft are parallel to each other.